

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Evan Pert Examiner #: 77099 Date: 2-14-00
 Art Unit: 2813 Phone Number 306 5689 Serial Number: 09 434 736
 Mail Box and Bldg/Room Location: CP4 4B36 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Method for Filling Contact Holes with Metal
by 2-Step Deposition

Inventors (please provide full names):

Sang Young Kim, Yung Wook Song, Hun Do Kim

Earliest Priority Filing Date: 10-21-91

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Legal Search

Priority to Korean 91-18500 10-21-91

07/964,362 10/21/92 abandoned

Patent No. 5,683,938

SEARCH FOR LITIGATION

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02-14-00A09:03 FILE

STAFF USE ONLY

Searcher: Tamie Toke
 Searcher Phone #: 302-6559
 Searcher Location: CP4 9C 15
 Date Searcher Picked Up: 2/14
 Date Completed: 2/14
 Searcher Prep & Review Time: 5
 Clerical Prep Time: _____
 Online Time: 8

Type of Search

NA Sequence (#) _____ STN _____
 AA Sequence (#) _____ Dialog _____
 Structure (#) _____ Questel/Orbit _____
 Bibliographic _____ Dr. Link _____
 Litigation X Lexis/Nexis _____
 Fulltext _____ Sequence Systems _____
 Patent Family _____ WWW/Internet _____
 Other _____ Other (specify) _____

Vendors and cost where applicable

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CRXX (CLAIMS Current Legal Status)
Legal Status actions current thru December 07,1999 (2000-01/UP)
Reassignment data current as of December 06,1999.
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OF THIS DATABASE, TYPE ..INFO LITA)

Cluster : LEGAL
Databases : LGST, CRXX, PAST, LITA

Search statement 1

?us5683938/pn

Term not in index/PN-LITA : US5683938

LGST	1
CRXX	1
PAST	1
LITA	0

** SS 1 : Results 3

Search statement 2

?prt full 1-3

1/3 LGST (1/1) - (C) LEGSTAT
PN - US 5683938 [US5683938]
AP - US 327887/94 19941024 [1994US-0327887]
DT - US-P
ACT - 19941024 US/AE-A
APPLICATION DATA (PATENT)
{US 327887/94 19941024 [1994US-0327887]]}
- 19971104 US/A
PATENT
- 19991221 US/RF
REISSUE APPLICATION FILED
19991102
UP - 1999-51

2/3 CRXX (1/1) - (C) CLAIMS/RRX
AN - 2902677
PN - 5,683,938 A 19971104 [US5683938]
PT - C (Chemical)
PA - Hyundai Electronics Industries Co Ltd KR
ACT - 19991102 REISSUE REQUESTED
Issue Date of O.G.: 19991221
Reissue Request Number: 09/434736
Examination Group responsible for Reissue process: 2812

UP - 1999-50
UACT- 1999-12-21

3/3 PAST (1/1) - (C) PAST
AN - 199951-001283
PN - 5683938 A [US5683938]
DT - A (UTILITY)
OG - 1999-12-21
CO - REA
ACT - REISSUE APPLICATION FILED
SH - REISSUE APPLICATION FILED

Search statement 2

Please ENTER the NAME of the file you want to search. To see a description of a file, type its page number and press the ENTER key.

FILES - PAGE 1 of 7 (NEXT PAGE for additional files)

NAME	PG	DESCRIP	NAME	PG	DESCRIP
---CASES & ADMINISTRATIVE DECISIONS---			-----PATENTS GROUP FILES-----		
IPOMNI	1	Int Prop Cases & Reg Matl	ALL	4	UTIL, DESIGN, PLANT, SIR,
PTOMNI	1	FEDCTS, PTO, ITC, ALLREG			REEXAM & REISS
CASES	1	FEDCTS, PTO & ITC	ALLPAT	4	Comb. ALL & INTPAT
FEDCTS	2	Patent cases from Fed. Cts.	-----U.S. PATENTS-----		
CCPA	2	Ct Customs & Patent Appeals	UTIL	4	Full Text Patents from 1971*
CAFC	2	Patent cases from Fed. Cir.	DESIGN	4	Full Text Patents from 1976
PTO	2	PATAPP & COMMR	PLANT	4	Full Text Patents from 1976
-----SECONDARY SOURCES-----					
IPLTR	5	Intell Prop Law Nwltrs			
IPLR	5	Intell Prop Law Rev Articles			

* Selected coverage 1/15/71 to 12/3/74

LEVEL - 1 OF 1 PATENT

5,683,938

<=2> GET 1st DRAWING SHEET OF 3

Nov. 4, 1997

Method for filling contact holes with metal by two-step
deposition

REISSUE: Reissue Application filed Nov. 2, 1999 (O.G. Dec. 21, 1999) Ex. Gp.:
2812; Re. S.N. 09/434,736

CORE TERMS: layer, hole, insulating, tungsten, selective, film, oxide, thin,
filling, gate...

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FILES - PAGE 1 of 7 (NEXT PAGE for additional files)

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---CASES & ADMINISTRATIVE DECISIONS---

IPOMNI 1 Int Prop Cases & Reg Matl
PTOMNI 1 FEDCTS, PTO, ITC, ALLREG
CASES 1 FEDCTS, PTO & ITC
FEDCTS 2 Patent cases from Fed. Cts.
CCPA 2 Ct Customs & Patent Appeals
CAFC 2 Patent cases from Fed. Cir.
PTO 2 PATAPP & COMMR

-----PATENTS GROUP FILES-----

ALL 4 UTIL, DESIGN, PLANT, SIR,
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ALLPAT 4 Comb. ALL & INTPAT
-----U.S. PATENTS-----
UTIL 4 Full Text Patents from 1971*
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IPLTR 5 Intell Prop Law Nwltrs
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5,683,938 OR 5683938

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-----PRIOR ART RESEARCH FILES-----

PUBS 7 Group file of these Journals:
COMM 8 Communications Journals
CMPTRS 9 Computers Journals
ELTRNC 10 Electronics Journals
TECHNY 11 Technology Journals
TRANS 12 Transportation Journals
ENERGY 13 Energy Journals

-----INTERNATIONAL MATERIALS-----

CUSINF 5 Customs Administ. Rulings
ITC 5 International Trade Comm
Rulings Series 337 & 731
TREATY 5 Intell Property treaties
CPR 5 Can. Patent Rprt.

GUIDE 14 LEXIS(R) Product Guide

-----PATENT LAW PERIODICALS-----

AIPLA 6 AIPLA Quarterly Journal
PTCLAW 6 Sec. of Intel. Prop. Law
HRVTEC 6 Harvard University Journal
of Law & Technology
LAWTEC 6 Journal of Law & Technology
JNLS 6 Combined AIPLA, PTCLAW
HRVTEC & LAWTEC
MHINTP 6 Martindale IP Listings
IPMAG 6 Intellect Prop
IPTDAY 6 Intellectual Property Today
IPWW 7 IP Worldwide
PATENT 6 Mar-Hub Pat. & TM Listings

5,683,938 OR 5683938

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-- Full-Text Group Files --			--- Full-Text By Type ---			- Full Text By Region -		
TODAY	2	Today's News	MAGS	4	Magazines	-- Papers & Wires --		
90DAYS	2	Last 90 days	MAJPAP	4	Major Papers	NON-US	2	English Non-US
CURNWS	2	Last 2 years	NWLTRS	4	Newsletters	US	2	US News
ARCNWS	2	Beyond 2 years	PAPERS	4	Newspapers	-- US Sources --		
ALLNWS	2	All News Files	SCRIPT	4	Transcripts	MWEST	4	Midwest
			WEBPUB	4	Web Pubs	NEAST	4	Northeast
-- Group File Exclusions --			WIRES	4	Wires	SEAST	4	Southeast
ALLABS	5	All Abstracts	----- Hot Files -----			WEST	4	West
NONENG	2	Non-English News	HOTTOP	3	Hot Topics *	----- Assists -----		
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5683938

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File 345:Inpadoc/Fam.& Legal Stat 1968-2000/UD=200004
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Set	Items	Description
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?s pn=us	5683938	
S1	1	PN=US 5683938
?t	1/39/1	

1/39/1
DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat
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12902227
Basic Patent (No,Kind,Date): KR 9512918 B1 19951023 <No. of Patents: 002>
Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date	
KR 9512918	B1	19951023	KR 9118500	A	19911021	(BASIC)
US 5683938	A	19971104	US 327887	A.	19941024	

Priority Data (No,Kind,Date):

KR 9118500 A 19911021
US 327887 A 19941024
US 964362 B1 19921021

PATENT FAMILY:

KOREA, REPUBLIC (KR)

Patent (No,Kind,Date): KR 9512918 B1 19951023
CONTACT FILLING METHOD USING SECONDARY DEPOSITION OF SELECTIVE TUNGSTEN
THIN FILM (English)

Patent Assignee: HYUNDAI ELECTRONICS IND (KR)

Author (Inventor): KIM SANG-YONG (KR); SONG YONG-UK (KR); KIM
HYON-DO (KR)

Priority (No,Kind,Date): KR 9118500 A 19911021

Applic (No,Kind,Date): KR 9118500 A 19911021

IPC: * H01L-021/768; H01L-023/522

Language of Document: Korean

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5683938 A 19971104
METHOD FOR FILLING CONTACT HOLES WITH METAL BY TWO-STEP DEPOSITION
(English)

Patent Assignee: HYUNDAI ELECTRONICS IND (KR)

Author (Inventor): KIM SANG YOUNG (KR); SONG YUNG WOOK (KR); KIM HUN
DO (KR)

Priority (No,Kind,Date): US 327887 A 19941024; KR 9118500 A
19911021; US 964362 B1 19921021

Applic (No,Kind,Date): US 327887 A 19941024

National Class: * 437192000; 437195000; 437981000

IPC: * H01L-021/28

CA Abstract No: * 127(26)364984C; 127(26)364984C

Derwent WPI Acc No: * C 97-548996; C 97-548996

Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No,Type,Date,Code,Text):

US 5683938 P 19911021 US AA PRIORITY (PATENT)

KR 9118500 A 19911021

US 5683938 P 19921021 US AA PRIORITY

US 964362 B1 19921021

US 5683938 P 19941024 US AE APPLICATION DATA (PATENT)
(APPL. DATA (PATENT))

US 327887 A 19941024

US 5683938 P 19971104 US A PATENT

US 5683938 P 19991221 US RF REISSUE APPLICATION FILED
(REISSUE APPL. FILED)

19991102

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